In the Claims:

Pending claims 1-16, 26-31, 43-46 and 50-53 are as follows:

1. (Previously Presented) A probe card assembly for testing a device comprising:

a substrate with probe contacts on a first surface;

a probe card to electrically connect said probe contacts to a test system;

an electrical connection means to connect the probe contacts to the probe card; and

support means positioned against a second surface of the substrate substantially opposite said probe contacts without electrically connecting to the probe contacts, the support means transmitting probe forces introduced when the probe contacts are urged against corresponding contacts on the device being tested.

2. (Original) The probe card assembly of claim 1, wherein the substrate comprises a ceramic material.

3. (Original) The probe card assembly of claim 1, wherein the substrate comprises an organic material.

4. (Original) The probe card assembly of claim 1, wherein the support means comprises a screw element.

5. (Original) The probe card assembly of claim 1, wherein the support means comprises an elastomer pad.

6. (Original) The probe card assembly of claim 1, wherein the support means comprises a gimble.

7. (Original) The probe card assembly of claim 1, wherein the support means comprises a rigid support member attached to the substrate opposite the probe contacts.

8. (Original) The probe card assembly of claim 1, wherein the support means comprises a gimble removably contacting a rigid support member attached to the substrate.

9. (Original) The probe card assembly of claim 1, wherein the electrical connection means comprises an interposer.

10. (Original) The probe card assembly of claim 1, wherein the electrical connection means comprises pogo pins.

11. (Original) The probe card assembly of claim 1, further comprising:

a frame provided around a peripheral edge of the substrate, the frame including a horizontal extension extending over the surface of the substrate, wherein the probe forces are transmitted by the support means to the frame.

12. (Original) The probe card assembly of claim 11, wherein the horizontal extension of the frame includes a load support member extending vertically from a surface of the horizontal extension to engage the first surface of the substrate in an area separated from the peripheral edge of the substrate.

13. (Original) The probe card assembly of claim 11, further comprising:

a first membrane provided between a surface of the horizontal extension of the frame and the first substrate surface; and

a second membrane provided between the first membrane and the substrate to engage the substrate in an area separated from the peripheral edge of the substrate.

14. (Original) The probe card assembly of claim 11, wherein the probe card comprises:

a printed circuit board (PCB) having connectors to connect with a test head on a first side, and electrical connection pads on an opposing second side for connecting to the electrical connection means, the probe card assembly further comprising;

a bracket fixedly attached to the second side of the PCB, the bracket being provided around the peripheral edge of the frame; and

leaf springs having a first end attached to the bracket, and a second end contacting the frame so that the force applied by the leaf springs and support means support the substrate within the frame.

15. (Original) The probe card assembly of claim 8, wherein the probe card comprises:

a printed circuit board (PCB) having connectors to connect to the test head on a first side, and electrical connection pads on an opposing side, the PCB including an opening through which the screw element passes; and

an interposer having electrically conductive spring contacts on each side to connect the pads of the PCB to the electrical contacts on the second surface of the substrate, the interposer including an opening through which the screw element passes.

16. (Original) The probe card assembly of claim 1, wherein the substrate comprises:

a first substrate layer having probe contacts on a first surface, the first substrate comprising a first material; and

a second substrate attached to a second surface of the first substrate, the second substrate including routing lines electrically connecting the probe contacts, the routing lines further providing connections to connect to the probe card, the second substrate comprising a second material having a lower flexural strength than the first material.

17-25. (Cancelled)

26. (Original) A probe card assembly for testing a wafer comprising:

a substrate having a surface supporting probe contacts; and

a frame provided around a peripheral edge of the substrate, the frame including a horizontal extension extending over the surface of the substrate supporting the probe contacts, the horizontal extension comprising a load support member extending vertically from a surface of the horizontal extension to engage the surface of the substrate supporting the probe contacts in an area separated from the peripheral edge of the substrate.

27. (Original) The probe card assembly of claim 26, wherein the load support member is machined into the frame.

28. (Original) The probe card assembly of claim 26, wherein the load support member comprises a flexible membrane.

29. (Original) A probe card assembly of claim 28, wherein the flexible membrane comprises:

a first membrane provided between a surface of the horizontal extension of the frame and the substrate surface; and

a second membrane provided between the first membrane and the substrate to engage the surface of the substrate supporting the probe contacts in the area separated from the peripheral edge of the substrate.

30. (Original) The probe card assembly of claim 29, wherein the first membrane and the second membrane comprise an electrically insulating material.

31. (Original) A probe card assembly of claim 26, wherein the horizontal extension extends over an area comprising 70% or more of the surface of the substrate supporting the probe contacts.

32-42. (Cancelled)

43. (Previously Presented) A probe card assembly for testing a device comprising:

a first substrate with probe contacts on a first surface, the first substrate comprising a first material;

a second substrate attached to a second surface of the first substrate, the second substrate including routing lines electrically connecting to the probe contacts, the routing lines further providing connections to a test system, the second substrate comprising a second material different than the first material;

a printed circuit board (PCB) having connectors for connecting to a test head on one side, and electrical connections provided on a second side for connecting to the routing lines of a second substrate;

an bracket fixedly connected to the PCB;

a frame provided around a peripheral edge of the second substrate, the frame including a horizontal extension extending over the first surface of the second substrate, wherein the

horizontal extension comprises a load support member extending vertically from a surface of the horizontal extension to engage the surface of the second substrate supporting the probe contacts in an area separated from the peripheral edge of the second substrate; and

leaf springs having a first end attached to the bracket, and a second end to engage a surface of the frame.

44. (Original) The probe card assembly of claim 43, wherein the load support member is machined into the frame.

45. (Original) The probe card assembly of claim 43, wherein the load support member comprises a flexible membrane.

46. (Currently Amended) The probe card assembly of claim 43 ~~42~~, wherein the leaf springs include bends between the first end and the second end to enable the peripheral edge of the frame to extend vertically from the bracket.

47-49. (Cancelled)

50. (Previously Presented) The probe card assembly of claim 1, wherein the probe contacts are provided within a defined area of the substrate, and wherein the support means contacts the second side of the substrate within the defined area.

51. (Previously Presented) A probe card assembly for testing a device comprising:

a substrate with probe contacts on a first surface;

a probe card to electrically connect said probe contacts to a test system;

an electrical connection means to connect the probe contacts to the probe card; and

support means positioned against a second surface of the substrate substantially opposite said probe contacts and rigidly connecting to the probe card, wherein the support means transmits probe forces introduced to the probe card when the probe contacts are urged against corresponding contacts on the device being tested.

52. (Previously Presented) The probe card assembly of claim 51, wherein the probe card comprises a rigid plate attached to a printed circuit board, wherein the support means rigidly attaches to the rigid plate.

53. (Previously Presented) The probe card assembly of claim 51, wherein the probe contacts are provided within a defined area of the substrate, and wherein the support means contacts the second side of the substrate within the defined area.